SECTION 7. BUILDING THE GCCS CORE SYSTEM

7.1 Scope

This section addresses the segments that must be installed on all GCCS systems, except EM servers, remote, and standalone systems which are covered in separate sections. It also provides detailed instructions for configuring the core GCCS system. Any SUN software packages should have been loaded (Section 5) prior to executing this section.

7.2 Initializing NIS+ Client

Before loading any segments the system should be initialized as a NIS+ client. This section assumes the NIS+ server (usually the EM server) has been initialized. Execute the following to initialize this NIS+ client.

Login as root and execute the following:

cd /etc/nis/admin<**Return**>
cat nis_client<**Return**>

```
Following an example of "nis_client" script

/usr/lib/nis/nisclient  -I -d facit.gccs.nis. -h  facit
```

1. Verify that the "nis_client" script has the correct NIS+ domain name following the "-d" (example: facit.gccs.nis.) and the correct NIS+ server name or IP address following the "-h" (example: facit). If they are not correct the script.

2. To initialize this platform as a NIS+ client execute the following:

   ./nis_client<**Return**>

```
Initializing client <example: hardey> for domain example:
facit.gccs.nis.#...
Once initialization is done, you will need to reboot your
machine.

Do you want to continue?  (Y or N)
```

3. Answer [**y**] and press <**Return**>.

```
setting up domain information<example: facit.gccs.nis. @>...
Can't open /etc/defaultdomain
mv: cannot access /etc/defaultdomain

setting up the name service switch information...

Please enter the network password that your administrator gave you.
Please enter the Secure-RPC password for root:
```

4. Enter **Anisplus@** if the platform is being initialized for the first time as a NIS+ client in this NIS+ domain. Enter the root password if the platform was previously a NIS+ client in this NIS+ domain.

```
Please enter the login password for root:
```

5. Enter the **root password** and press <**Return**>.

```
Client initialization completed!!
Please reboot your machine for changes to take effect.
```

6. Before rebooting execute the following:

   `cat /etc/nsswitch.conf` <**Return**>

```
#
# /etc/nsswitch.nisplus:
#
# An example file that could be copied over to /etc/nsswitch.conf; it
# uses NIS+ (NIS Version 3) in conjunction with files.
#
# "hosts:" and "services:" in this file are used only if the
/etc/netconfig
# file contains "switch.so" as a name to addr library for "inet"
transports.

# the following two lines obviate the "+" entry in /etc/passwd and
/etc/group.
passwd:       nisplus files
group:        files nisplus

# You must also set up the /etc/resolv.conf file for
# DNS name server lookup.  See resolv.conf(4).
hosts:          files dns nisplus [NOTFOUND=return]

services:     files
# "networks" added to nisplus for GCCS 2.2
networks:     nisplus files
protocols:    files
rpc:          files
ethers:       files
netmasks:     files
bootparams:   files

publickey:    nisplus

netgroup:     nisplus

# "automount" added to nisplus for GCCS 2.2
automount:    files nisplus
aliases:      files nisplus
sendmailvars: files nisplus
```

7. The */etc/nsswitch.nisplus* is replaced by the */etc/nsswitch.conf* file used by GCCS. Consequently the correct "nsswitch.conf" file should be in place after the NIS+ server is initialized. The file should look like the following. Note the "automount" and "network" entries are now "nisplus files" vs just "files" in GCCS 2.1.

8. If this system is sharing file systems the "*/etc/dfs/dfstab*" will have to be modified to use the NIS "netgroup" file to restrict access. To determine if the system is sharing any file systems execute the following:

   `/usr/sbin/share` <**Return**>

```
      -/h/USERS    anon=0  A @
```

9. Line(s) similar the one shown above should be displayed if the platform is sharing file systems.

10. To restrict access to the Aanon=0" file systems a script has been provided that modifies the */etc/dfs/dfstab* file. To execute this script do the following:

    cd /etc/nis/admin<**Return**>
    ./netgroup_share<**Return**>

```
Enter the group name you wish to use, name [allowed] recommended@
```

11. The GCCS COE Kernel built the NIS+ Anetgroup@ file with a group name of Aallowed@. If you are using that Anetgroup@ enter Aallowed@. Otherwise, use the group name you specified and press **<Return>**.

12. If the */etc/nsswitch.conf* file is correct reboot the system by executing the following.

    uadmin 2 1<**Return**>

13. Verify that NIS+ is operating correctly by executing the following:

    niscat passwd.org_dir<**Return**>

```
secman:puNbJU.apVpGc:100:1:Security
Admin:/h/USERS/secman/Scripts:/bin/csh:9654::::::
```

14. At a minimum the line shown above should be in the NIS+ password database.

7.3 Post GCCS COE Kernel Installation Procedures

Prior to loading any applications the GCCS COE segment must be installed and configured. In addition the Kernel Patch 3 segment must be installed to update several functions in the system. If the Character based accounts are being used, the CharIF account group must be loaded. All of these segments are available on Application Tape 1, except for Kernel Patch 3, which is available on Ahornet@ at the OSF. Execute the following:

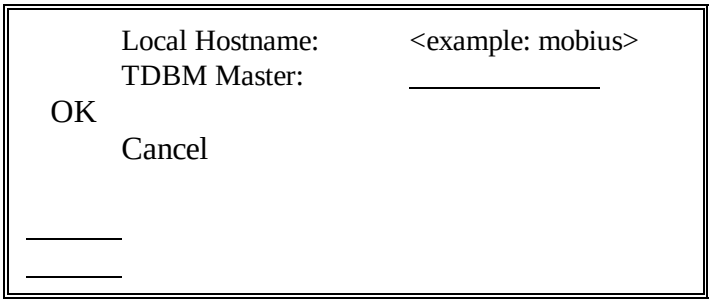
1. Bring up the Segment Installer and select the Kernel Patch 3 segment for installation. Do not

NOTE: Disregard warning message displayed during Kernel Patch 3 installation.

reboot the system until the GCCS COE is loaded and configured.

2. After the Kernel Patch 3 is installed select the latest version of the GCCS COE 2.2 segment for installation. If using tape, insure that you specify */dev/rmt/0mbn*. GCCS COE is actually three segments (GCCS COE, UB Core, and Link 11) and will only load successfully if the *Ab@* option is used.

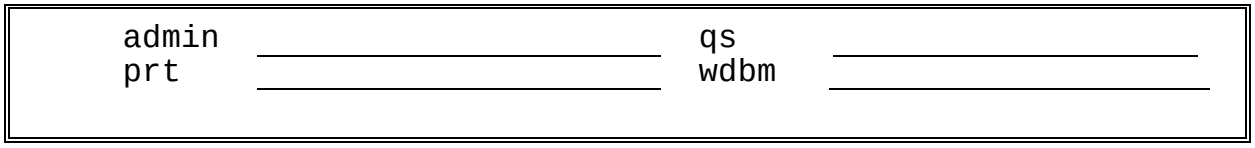
3. After the successful completion of the installation you will be instructed to configure the system by selecting ASystem Configuration@ from the ANetworks@ menu. This will display the SysCon GUI. If the SysCon GUI looks like the following, you must cancel and restart the system prior to continuing.



4. On the right side of the SysCon Window verify that the hostname in the Local Hostname: field is your workstation=s hostname.

5. In the TDBM Master: field, enter the TDBM Server hostname for your workstation. If no TDBM master server exist at your site enter the hostname of the EM server.

6. Any hostname may be entered in the following fields, but typically in the GCCS environment they should all be the TDBM server hostname. If no TDBM master server exist at your site enter the hostname of the EM server.



7. On the left side of the SysCon Window the Full Host #1 will be the hostname of the TDBM Master. You may add additional hosts by clicking on the toggle box beside the host entry you wish to change. When the toggle box is activated (**yellow**), the host is designated as a Full host; and when the toggle box is deactivated (**empty**), it is designated as a Printer host.

NOTE: On GCCS networks, the 5 printer host fields should always be left empty.

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8. Click the name field next to the appropriate toggle box. The field will become active and is now editable. Enter the name of the host.

9. Click OK to save the changes you have made to the Hosts box.

10. After the system is configured you should reboot the system as instructed, using the "Restart" option under the "System" menu.

11. If the Character based interface is to be used the CharIF account group should be loaded next. There is no special configuration required when loading this segment.

7.4 Loading Required Segments

Table 7.4-1 list all the Core and Network Management Segments that should be loaded on each GCCS system. Any special instructions required when installing the segments are listed in the comments field. All the segments are installed using the Segment Installer.

Table 7.4-1. GCCS 2.2 Core and Network Management Segments

Application	Version	Size	Tape	Comments
GCCS Core Segments				
Applix	3.2	92379	2.2 (AP.1)	Must be loaded before CCAPPS
ASET Client	gv.1.02	25	2.2 (AP.1)	ASETSV Must be installed first
* Aset Server	gv.1.04.03	2233	2.2 (AP.2)	
* Auditing	3.0.04	112	2.2 (AP.1)	
* BSM Patch.P1	1.1.06	20	2.2 (AP.1)	Load patch before deinstalling old audit segments
* Cmd Ctr Apps	3.1.2	103166	2.2 (AP.1)	
* EM Patch	6.0.1	22462	2.2 (AP.1)	Load only on an upgrade from 2.1to 2.2
* EM Printer Admin	2.3.1.04	3084	2.2 (AP.1)	

* filemgr	1.0	19	2.2 (AP.1)	
* GCCS COE	2.2.0.5.02	68153	2.2 (AP.1)	Must reboot after configuring.
* Kernel Patch 1	1.0	370	2.2 (AP.1)	Must reboot after loading.
* Kernel Patch 2	1.0	309	2.2 (AP.1)	
GCCS ftp tool	4.3	342	2.2 (AP.1)	
ICON FOR APPLIX	1.0	21	2.2 (AP.1)	Install if not using Sybase
* Mail Services	2.2	2830	2.2 (AP.2)	
PERL	6.0	4720	2.2 (AP.1)	
Remote Install	1.1.1	2068	2.2 (AP.1)	
Run_Remote	1.3.02	86	2.2 (AP.1)	
* System Maintenance	1.7	421	2.2 (AP.1)	
* Tcl/Tk Application	7.5	10504	2.2 (AP.1)	
* Unix Systems MGMT Agent	2.0.0.02	985	2.2 (AP.1)	
UPSI Power Monitor	1.3.b	411	2.2 (AP.1)	Cable must be connected prior to installation. Load only if using UPSI system.
* WABI Desktop	2.1	10133	2.2 (AP.2)	
XLOCK ICON	1.0	21	2.2 (AP.1)	
Network Management Segments				
NETM Memory Config	1.0.04	26	2.2 (AP.2)	
Network Monitoring Agent	4.5.03	26820	2.2 (AP.2)	

* Segment is new and should be loaded if upgrading from 2.1 to 2.2.

7.5 Configuring Auditing

The latest version of the Auditing segment automatically configures the system to do auditing. After loading the segment you will be instructed to boot the system in single user mode and run the bsmconv command.

Perform the following steps:

1. After loading the Auditing segment exit the Segment Installer and execute the following to initialize auditing:

   `uadmin 2 0` **<Return>**

```
INIT: SINGLE USER MODE

type Ctrl-d to proceed with normal startup
(or give root password for system maintenance):
```

   `ok  boot -s` **<Return>**

2. Enter the **root** password and press **<Return>**.

3. Enter the following to initialize auditing:

   `cd /etc/security` **<Return>**
   `bsmconv` **<Return>**

4. Reboot the system by executing the following:

   `uadmin 2 1` **<Return>**

7.6 Configuring Printing

After loading the *Printer Administration* segment you will define your printers if they have not been previously defined. Each user will also be required to select which printers they wish to have available.

7.7 Where To Next

The sections listed below provide instructions on loading the various categories of applications available in GCCS. You may be installing applications from all these sections, except for Section 10, which is for Oracle Database Servers only. Go to the appropriate sections to continue the installation process. Note, if you are performing an upgrade on the Oracle Database Server, you should go to section 10.2. Section 10.3 is only for building Oracle Database Servers from the operating system up.

Section 8 Building JOPES Application Server.
Section 9 Building JOPES SPARC Client.
Section 10 Building Oracle Database Server.
Section 11 Building A Unified Build SUN Platform.
Section 12 Teleconferencing Installation Procedures.
Section 13 Building Character Based Server.

Section 15 Loading GCCS Mission Applications.